Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) An apparatus within a processing system having multiple subsystems, for disassociating the power consumed by the processing system with instructions it is executing, the apparatus comprising:

    a power prediction system, for providing a predictor of estimated power that will be consumed during execution of the instructions; ~~and~~

    a subsystem inhibition control, coupled to said power prediction system, for receiving said predictor, and for turning on/off selected ones of the subsystems based on the value of said predictor; and

    a power counterweight, coupled to said power prediction system, to produce a counterweight current causing, in combination with said inhibition control, the total power consumption of the processing system to remain the same, regardless of which instructions are executing on the processing system;

    wherein by turning on/off ones of the selected subsystems, said subsystem inhibition control causes a total power consumption of the processing system to be disassociated with the instructions it is executing.

2. (original) The apparatus as recited in claim 1 wherein said power prediction system comprises:

    a power profile table having a plurality of power consumption entries, said entries corresponding to types of instructions that may be executed by the processing system.

4

3.   (original) The apparatus as recited in claim 2 wherein each of said power consumption entries comprises a plurality of power consumption values, said values corresponding to a predicted power consumption of an instruction within particular processing stages of the processing system.

4.   (currently amended) The apparatus as recited in claim 1 wherein the multiple subsystems comprise:

a floating point unit; or

[[an]] a media processing unit unit.

5.   (original) The apparatus as recited in claim 1 wherein said subsystem inhibition control comprises:

selection control, for determining which of the subsystems are available to be turned off; and

subsystem power profiles, coupled to said selection control, for specifying an estimated power consumption for each of the subsystems.

6.   (original) The apparatus as recited in claim 5 wherein said selection control utilizes said estimated power consumption for each of the subsystems to determine which, if any, of the subsystems to turn on/off.

7.   (original) The apparatus as recited in claim 5 wherein said selection control turns on/off ones of the subsystems via inhibit/burn signal lines.

8.   (original) The apparatus as recited in claim 1 wherein said subsystem inhibition control turns on/off selected ones of the subsystems to cause the total power consumption of the processing system to remain the same, regardless of which instructions are executing on the processing system.

9.   (original) The apparatus as recited in claim 1 wherein said subsystem inhibition control turns on/off selected ones of the subsystems to cause the total power consumption of the processing system to be random, regardless of which instructions are executing on the processing system.

10.   (canceled)

11.   (currently amended) The apparatus as recited in claim [[10]] 1 wherein said power counterweight is provided a maximum power threshold for the processing system, and configures said counterweight current such that the total power consumed by the processing system equals said maximum power threshold.

12.   (original) The apparatus as recited in claim 11 wherein said maximum power threshold is a default established during manufacture of the processing system.

13.   (original) The apparatus as recited in claim 11 wherein said maximum power threshold is configurable by software executing on the processing system.

Claims 14-40 (canceled)